

# ***Headquarters U. S. Air Force***

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## ***AF Software Intensive Systems Strategic Improvement Program (AFSSIP)***



**U.S. AIR FORCE**

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# *Overview*

- n **Background**
- n **AFSSIP Approach**
- n **Related Activities**
- n **Way Ahead**

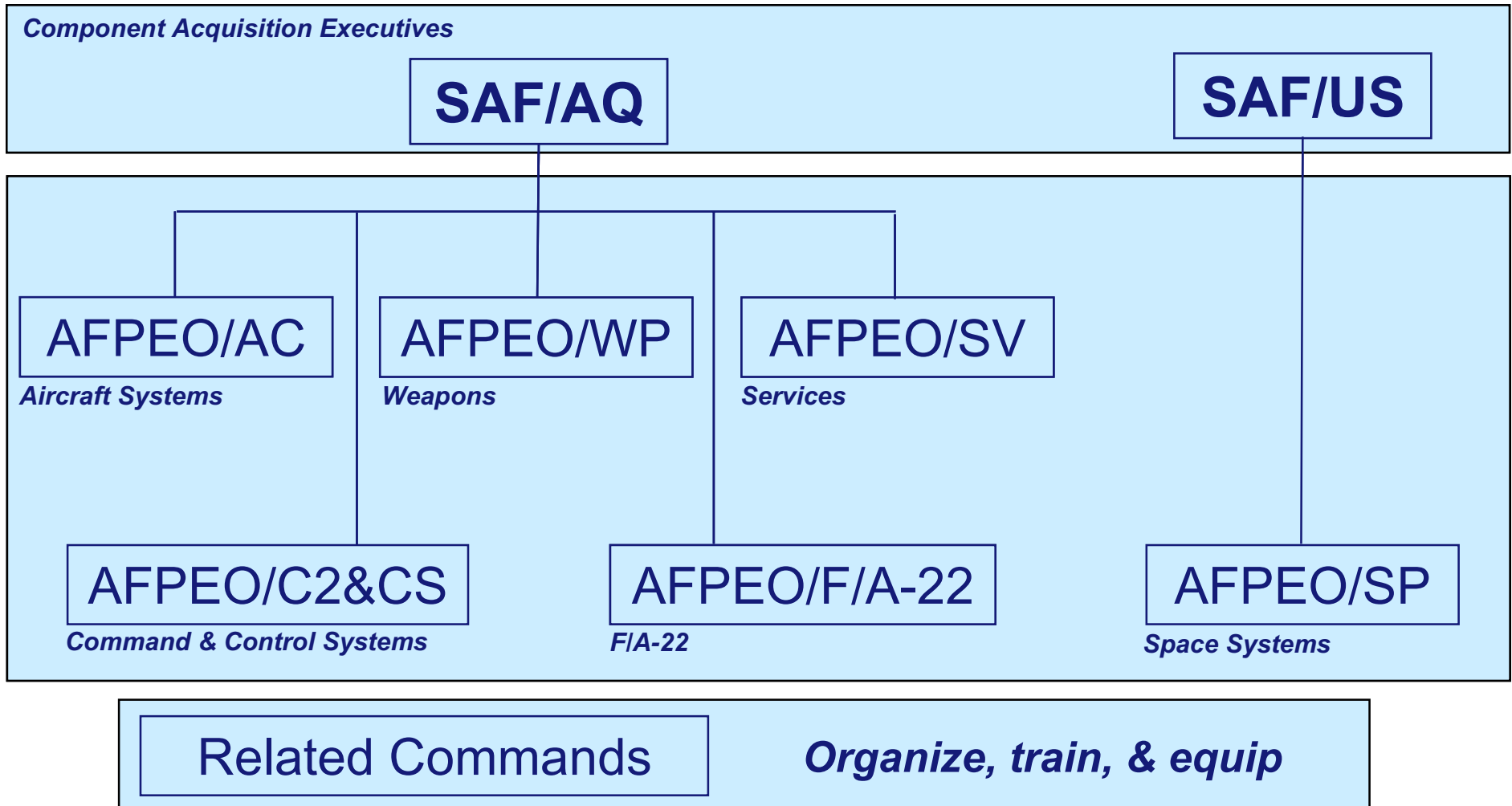


# ***Background***

- n **FY03 Authorization Act (Pub. Law 107-314), Section 804**
  - n Services implement S/W acquisition improvement programs
  - n Focus on Processes, Metrics, People, and Compliance
- n **Mar 03 OSD Memo**
  - n DoD SISSG oversight of services/agencies programs
  - n Additional focus areas (e.g. Config. Management, T&E)
- n **Various process improvement activities already underway**
  - n Mix of systems focus, software focus, or both
  - n Not integrated



# ***Air Force Organizations With Major Acquisition Roles***



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# ***AFSSIP Approach***

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- n **Guidance from Dr. Sambur (SAF/AQ)**
  - n Ensure AFSSIP meets Congressional intent
  - n Focus on AF acquisition programs
  - n Implement through AF Acquisition Executives & PEOs
  
- n **Congressional Intent**
  - n Based on October 2003 discussions with SASC staffers
  - n Focus on MDAPs, not IT
  - n Ensure software is properly addressed in program reviews



# ***AFSSIP Strategy***

## ***SAF/AQ – SAF/US 13 Jan 04 Memo to PEOs***

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### **n Program Purpose**

- n Evaluate efficiency and effectiveness of software management and processes as part of systems engineering and capability acquisition
- n Identify changes that may be needed to improve them

### **n Working Group Responsible to Execute**

- n Core team
- n PEO representatives
- n Industry representatives

### **n Report results to CAEs by July 2004**



# ***Core Team***

## **n Membership**

- n Software experts from product and logistics centers, SAF/AQ, supporting organizations, SEI, and support contractors

## **n Responsibilities**

- n Define overall AFSSIP approach
- n Accomplish familiarization and feedback for PEOs
- n Assist with data gathering from acquisition programs
- n Define As-Is and To-Be states
- n Perform gap analysis
- n Define roadmap and implementation recommendations
- n Accomplish all activities required to produce AFSSIP products and results





# ***PEO Representatives***

## **n Membership**

- n Acquisition Program Representatives appointed by PEOs
- n Senior program managers and engineers with software acquisition experience

## **n Responsibilities**

- n Provide program experience and data
  - n Information on section 804 focus areas
  - n Problems encountered / success stories
  - n Recommended best practices
- n Review interim core team products and provide heading checks



# ***Industry Representatives***

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- n **Responsibilities similar to those of PEO Representatives:**
  - n Solicited for input to As-Is and To-Be states
  - n Review and validate working group products and provide input to roadmap and recommendations



# ***Desired Acquisition Program Information (Draft)***

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- n **Program description**
  - n **Policy & guidance (all levels)**
  - n **Organizational structure and practices**
  - n **People, training, and experience**
  - n **Resources, funding, and investment**
  - n **Processes**
  - n **Metrics**
  - n **Best Practices**
  - n **Technology development and insertion**
  - n **Potential improvement activities**
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# Challenges

## n **Achieving balance:**

- n Prescribed processes with program manager autonomy, responsibility, and accountability
- n Integration within the systems engineering process with software stovepipes
- n Level of software insight with acquisition workforce downsizing
- n Need for speed of acquisition with adherence to disciplined processes

## n **Additional challenges:**

- n Commonality across acquisition organizations
- n Reporting
- n Training



# ***Related On-Going Activities***

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- n **Air Force Level**

- n Systems Engineering Revitalization
  - n Center for Systems Engineering (CSE)

- n **Air Force Materiel Command (AFMC) / Air Force Space Command (AFSPC)**

- n Software Intensive Systems Steering Group

- n **Acquisition Center Initiatives**



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# ***Air Force Level Activities***

## **n Systems Engineering Revitalization**

- n Focus on application of systems engineering practices through system life cycle
- n Incentivize contractors to perform more robust SE
- n Report status of SE processes/practices in program reviews

## **n Center for Systems Engineering (CSE)**

- n Air Force & DoD SE Center of Excellence
- n Advocate, consult, implement, and provide training for SE
- n Repository for academic, government and industry SE best practices, processes, metrics and training

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# ***AFMCI/AFSPC Activities***

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- n **Software Intensive Systems Steering Group**
  - n Foster collaboration among AFMC product, logistics and test centers
  - n Disseminate S/W development and sustainment best practices
  - n Source of resources for AFSSIP
  - n Organize, train, and equip



# ***A Possible Outcome***

- n **Air Force**

- n Software addressed as an integral part of systems engineering policy

- n **AFMC/AFSPC**

- n Joint policies and implementation guidance
  - n Training

- n **Centers**

- n Tailored implementations
  - n Training





# ***AFSSIP Schedule***

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<b><u>Task</u></b>	<b><u>Complete</u></b>
n <b>PEOs provide AFSSIP Working Group (WG) reps</b>	<b>30 Jan 04</b>
n <b>Finalize AFSSIP WG Charter</b>	<b>2 Feb 04</b>
n <b>Core Team Initial Activities</b>	<b>Mar 04</b>
n <b>“As Is” State Draft</b>	
n <b>“To Be” State Templates</b>	
n <b>Planning for Working Group meeting</b>	
n <b>Working Group Session</b>	<b>Apr 04</b>
n <b>“As Is” &amp; “To Be” Gap Analysis</b>	<b>May 04</b>
n <b>Develop Roadmap &amp; Implementation Recommendations</b>	<b>Jun 04</b>
n <b>Brief Roadmap and recommendations to SAF/AQ/US</b>	<b>Jul 04</b>

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